

AUTHOR: Idlis, G. M. 514

TITLE: On the article by A. M. Mikishin and F. A. Tsitsin "On some problems in the theory of galactic potential". (O stat'ye A. M. Mikishi i F. A. Tsitsina "O nekotorykh voprosakh teorii galakticheskogo potentsiala").

PERIODICAL: "Astronomicheskii Zhurnal" (Journal of Astronomy), 1957, Vol.34, No.2, pp. 298 - 301 (USSR).

ABSTRACT: The article by Mikishin and Tsitsin (1), which operates with negative (!) densities of matter in discussing galactic models, is shown to be physically groundless. It is noted that all their "critical remarks" in connection with the work of P. P. Parenago and G. M. Idlis are based on a misunderstanding and misinterpretation of the Newtonian potential in its generally accepted sense. All the four deductions given by Mikishin and Tsitsin are erroneous. Their attempt to contrast the theories of the galactic potential of Parenago and Idlis is a result of a trivial misunderstanding. It is pointed out that the graphs given in this article appear to have little connection with the formulae in the text, and in some cases even contradict them. 12 references, all of which are Russian.

Astrophysical Institute,  
Ac. Sc., Kazakhstan.

Recd. Feb.18, 1956.

AUTHOR: Idlis, G. M. 33-5-8/12

TITLE: On the Evolutionary Interpretation of the Main Sequence Stars. (Ob Evolyutsionnoy Interpretatsii Glavnoy Posledovatel'nosti Zvezd.)

PERIODICAL: Astronomicheskii Zhurnal, 1957, Vol.34, No.5, pp. 755-769. (USSR)

ABSTRACT: If, as is generally accepted, evolution takes place during the life of stars (mainly continuous shift on the spectrum-luminosity diagram) then all the sequences, including the main sequence, on this diagram should have such an evolutionary character. However, the direction and tempo of stellar evolution and the initial conditions of formation of the corresponding stars and their final states require a special analysis. In this it is insufficient to start as was done in Reference 1 from a single luminosity function  $\phi(M)$ . In the present paper a survey is given of the main arguments which lead to the idea of corpuscular emission from early stars of the main sequence. An estimate is made of the rate of loss of mass and it is shown that the evolution may be characteristic only of the first part of the main sequence. It is shown that Fesenkov's hypothesis (Refs. 8 and 6) of corpuscular emission as the main factor in stellar evolution appears

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On the Evolutionary Interpretation of the Main Sequence Stars.

are in general agreement with the results of Aller (Ref. 44) who found that the mean helium content in certain B-stars is of the same order of magnitude. If the bright giants of stellar population of type I are formed from stars similar to those belonging to the early spectral classes of the main sequence then their stellar growth varies between the mean growth of stars belonging to the second part of the main sequence and max $\gamma$ , i.e. the dispersion of their peculiar velocities in the galactic plane should be in the range  $V = 19\text{km/sec}$  to  $V = 25\text{km/sec}$ . This is in agreement with the work reported by Williams (Ref. 49) and Wysotsky (Ref. 50). There are 1 figure, 4 tables and 50 references, 37 of which are Slavic.

SUBMITTED: December, 19, 1956.

ASSOCIATION: Astrophysical Institute of the Academy of Sciences of the ~~Kazakh SSR~~ (Astrofizicheskiy Institut Akademii Nauk KazSSR)

AVAILABLE: Library of Congress.

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IDLIS, G.M.

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PHASE I BOOK EXPLOITATION

80V/3823  
80V/20-M-7

Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut

Izvestiya, tom 7 (News of the Astrophysics Institute, Academy of Sciences, Kazakhskaya SSR, Vol. 7) Alma-Ata, 1958. 110 p. Errata slip inserted. 900 copies printed.

Ed.: F.Ya. Osadchiy; Tech. Ed.: Z.P. Rorokina; Editorial Board: G.M. Idlis, M.G. Karimov, Z.V. Karyagina (Secretary), D.A. Rozhkovskiy, and V.G. Fesenkov (Resp. Ed.).

PURPOSE: The book is intended for astronomers and astrophysicists.

COVERAGE: This is a collection of 12 articles. In the first four articles V.G. Fesenkov deals with the formation of stars and planets, describes star chains and dark filaments in the region of galactic nebulae, and reports on the observation of Mars with an 8" refractor during the opposition of 1956, and on photometrical observation of the northern zodiacal light in July 1957 using a visual binocular of the author's design. The remaining articles, written by different authors, deal mainly with problems of spectroscopy such as the scattering of light in the atmosphere in the nearest infrared region of the

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News of the Astrophysics Institute (Cont.)

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AVAILABLE: Library of Congress

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JA/REM/mas  
7-15-60

24(0)

AUTHOR:

Idlis, G. M.

SOV/20-122-6-11/49

TITLE:

A Practical Criterion for the Steady or Non-Steady State of Finite Self-Gravitating Star Systems (Prakticheskiy kriteriy statsionarnosti ili nestatsionarnosti konechnykh samogravitiruyushchikh zvezdnykh sistem)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6, pp 997-998 (USSR)

ABSTRACT:

The author investigates a criterion for the applicability or non-applicability of the steady model to a real system of stars with the average density  $\delta$ . The "circular velocity" of the bodies within the system at a distance  $r$  from the center of mass is of the order  $v_0 = \sqrt{4/3\pi G \delta} r$ .

For the period of revolution it applies analogously that

$$P_0 = \frac{2\pi r}{v_0} \sqrt{\frac{3\pi}{G\delta}}. \text{ On the other hand, the average quadratic}$$

velocity of the stars in the center of mass system is expressed according to the virial theorem (which is applicable to steady

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SOV/20-122-6-11/49

A Practical Criterion for the Steady or Non-Steady State of Finite Self-Gravitating Star Systems

and linearly non-steady systems) is expressed by the mass  $M$  of the system and by the radius  $r$  in the following manner:

$\sqrt{v^2} = \sqrt{\frac{1GM}{2r}}$ , i.e. the period of the oscillation along the mean radius  $2r$  of the system is of the order

$P_1 = \frac{4\bar{r}}{\sqrt{v^2}} = \sqrt{\frac{32\bar{r}^3}{GM}} = \sqrt{\frac{24}{\pi G\bar{\rho}}} \approx P_0 \approx \frac{3}{\sqrt{G\bar{\rho}}}$ . Consequently, the period  $P = \sqrt{\frac{3}{G\bar{\rho}}}$  characterizes the duration of an essential

displacement of the bodies within the system. Every finite cosmic system has at some time been formed from something, and in this sense has a certain age  $T$ . The criterion given here ( $T \leq P$  for non-steady systems and  $T \gg P$  for steady systems) agrees well with the astronomical data given by a table. There are 1 table and 29 references, 22 of which are Soviet.

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SOV/20-122-6-11/49

A Practical Criterion for the Steady or Non-Steady State of Finite Self-Gravitating Star Systems

ASSOCIATION: Astrofizicheskiy institut Akademii nauk KazSSR  
(Astrophysical Institute of the Academy of Sciences, Kazakh SSR)

PRESENTED: June 5, 1958, by V. G. Fesenkov, Academician

SUBMITTED: June 5, 1958

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3(1)

AUTHOR:

Idlis, G. M.

SOV/20-123-6-11/50

TITLE:

A General Expression for the Phase Density of Finite Steady Axially Symmetrical Selfgravitating Stellar Systems and Their Differential Axial Rotation (Obshcheye vyrazheniye dlya fazovoy plotnosti konechnykh statsionarnykh osesimmetrichnykh samogravitiruyushchikh zvezdnykh sistem i ikh differentsial'noye osevoe vrashcheniye)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 994-997 (USSR)

ABSTRACT:

The phase density  $\Psi$  (which, according to Liouville's (Liuvill') theorem  $D\Psi/Dt = 0$ , is an integral of motion) can be represented as an arbitrary function of any complete system of the corresponding independent integrals of motion (theorem of Jeans (Dzhins)). For self-gravitating stellar systems of steady axially symmetrical potential  $\Phi = \Phi(R, z)$  the spatial mass density  $\delta = \delta(R, z)$ , the corresponding Poisson (Puasson) equation

$$4\pi G\delta = -\frac{\partial^2 \Phi}{\partial R^2} - \frac{1}{R} \frac{\partial \Phi}{\partial R} - \frac{\partial^2 \Phi}{\partial z^2} \text{ and, generally speaking, also}$$

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A General Expression for the Phase Density of Finite Steady Axially Symmetrical Selfgravitating Stellar Systems and Their Differential Axial Rotation

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the phase density  $\Psi = \Psi(R, z, v_R, v_z, v_\phi)$  must have analogous properties.  $\delta$  satisfies the integral equation

$$\delta = \int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} \Psi dv_R dv_z dv_\phi.$$

The general expression for such a phase density can contain only single-value axially symmetrical integrals of motions of an individual star as independent arguments. Calculations are discussed in short. In the general case of an axially symmetrical steady potential  $\Phi = \Phi(R, z)$ , there can and must exist only one single-value integral of motion which does not depend on the energy integral and on the integral of the kinetic motion. The corresponding general expression for  $\Psi$  must therefore contain 3 single-value axially symmetrical integrals of motion of an individual star:

$$\Psi = \Psi(I_1, I_2, I_3) = \Psi((1/2)v^2 - \Phi(R, z), Rv_\phi, I_3).$$

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A General Expression for the Phase Density of  
Finite Steady Axially Symmetrical Selfgravitating Stellar Systems and Their  
Differential Axial Rotation

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The symmetric and the antisymmetric (with respect to  $v_{\theta}$ ) parts and the combinations of the quantities  $v_R$  and  $v_z$  must also be integrals of motion. The possible systematic motions of stellar centroids in steady axially symmetrical stellar systems are reduced only to a differential rotation around a symmetry axis. The calculations discussed in the present paper give results which agree with the kinematic properties of galactics and the regular extragalactic nebulae. There are 9 references, 8 of which are Soviet.

ASSOCIATION: Astrofizicheskiy institut Akademii nauk KazSSR (Astrophysics Institute of the Academy of Sciences, Kazakhskaya SSR)

PRESENTED: August 8, 1958, by V. G. Fesenkov, Academician

SUBMITTED: August 8, 1958

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IDL 15, G M.

PHASE I BOOK EXPLOITATION 807/3405

Sveshchaniye po voprosam kosmogonii. 6ta, Moscow, 1957

Tranlaticheskaya astronomiya i kosmologiya; trudy sovetskaniya (Extraneous Astronomy and Cosmology); Transactions of the 6th Conference on Problems of Cosmogony, June 5-7, 1957) Moscow, AN SSSR, 1959. 273 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademniya nauk SSSR.

Ed. of Publishing House: L.V. Samonukha; Tech. Ed.: G.M. Shvachko; Editorial Board: B.A. Prut-Kamenetskiy (Resp. Ed.) Pre-essor: B.A. Vorontsov-Vel'yaminov, Corresponding-Member.

PURPOSE: The book is intended for astronomers and physicists studying problems of general cosmology.

COVERAGE: The book is a collection of papers on cosmogony read by scientists participating in a conference held in Moscow on June 5-7, 1957. The papers review recent observational and theoretical work in extragalactic astronomy, gravitational theory, theory of relativity, red shift, radio astronomy, formation of chemical elements, thermodynamics of the universe, entropy, etc. No personalities are mentioned. There are references following most of the reports.

Author: B.Ye. Spiral. Spiral Galaxy M 101  
Editor: B.Ye. Samonukha. Reliability of Observational Data in Extra-  
Galactic Astronomy

Krasovskiy, V.I. and P.V. Shubert, Application of Electromis-  
Optical Methods to Extragalactic Astronomy

Nitterich, V.Y. Recent Sources of Radio Radiation (Radio Stars)

Unshburg, V.I. Experimental Verification of the General  
Theory of Relativity (Summary of Report)

Vlasov, A.A. Spatial, Non-homogeneous Distributions of the  
System of Gravitating Particles

Seredinskiy, A.Ya. Isotropic Models of the Universe

Lifshitz, E.M. Gravitational Stability in the General Theory  
of Relativity (Summary of Report)

Zel'manov, A.L. Relativistic Theory of an Anisotropic Non-  
Homogeneous Universe

Shirakov, M.P. Theory of Red Shift in Spectra of Distant  
Nebulae

Shklovskiy, I.S. Radio Astronomy and Cosmology (Summary of Report)

Gerasimov, V.Y. Conditions of Formation of Atomic Nuclei  
According to Data on Their Distribution

Frank-Kamenetskiy, D.A. Origin of Chemical Elements From the  
Point of View of the Theory of Internal Structure and Stellar  
Evolution

Zaslavskiy, Ya.P. Problems of Statistical Physics and Thermo-  
dynamics of Gravitating Systems

Idlis, G.M. Structural Infinity of the Universe and the  
Milway as a Typical Populated Cosmic System (Sum-  
mary of Report)

Plotkin, J.R. Some Remarks on the Growth of Entropy

Stanyukovich, K.P. On the Thermodynamics of the Universe

Idlis, G.M. General Problems of Cosmology

PHASE I BOOK EXPLOITATION

Akademniya nauk Kazakhskoy SSR. Astrofizicheskiy institut

Izvestiya, tom VIII (News of the Astrophysics Institute, Kazakh SSR Academy of  
Sciences, vol. 8) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1959. 850 copies printed.

Eds.: F. Ya. Osadchiy, and Yu. N. Kuznetsov; Tech. Ed.: Z. P. Borokina; Editorial  
Board: G. M. Idlis, M. G. Karimov, Z. V. Karyagina (Secretary), D. A.  
Rozhkovskiy, V. G. Posenkov (Resp. Ed.).

PURPOSE: This collection of articles is intended for geophysicists and astronomers.

COVERAGE: This collection of articles in astronomy contains studies on the distri-  
bution of asteroids as revealed by zodiacal light characteristics, the distortion  
of the luminosity curve of a variable star, the integrals of motion of an in-  
dividual star, the electromagnetic mechanism in solar prominences, sky polariza-  
tion in the Libyan desert, projector research, etc. English abstracts accompany  
each article. References follow individual articles.



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AVAILABLE: Library of Congress

Card 3/3

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3-15-60

3(1),10(4)

AUTHOR: Idlis, G.M.

SOV/33-36-1-10/31

TITLE: Symmetry of Stationary Axialsymmetric Stellar Systems Relative to the Equatorial Plane

PERIODICAL: Astronomicheskiy zhurnal, 1959, Vol 36, Nr 1, pp 85-88 (USSR)

ABSTRACT: In the present paper the author gives a theoretical proof for the fact that stationary axialsymmetric self-gravitating stellar systems with a finite mass are symmetrical to the equatorial plane.

There are 2 references, 1 of which is Soviet, and 1 German.

ASSOCIATION: Astrofizicheskiy institut Akademii nauk Kaz SSR (Astrophysical Institute of the AS Kazakhskaya SSR)

SUBMITTED: June 5, 1958

IDLIS, G. 177

PHASE I BOOK EXPLOITATION

SOV/4605

Akademiya nauk SSSR. Astrofizicheskiy institut

Izvestiya, tom 10 (News of the Astrophysics Institute of the Academy of Sciences Kazakhskaya SSR) Alma-Ata, 1960. 100 p. 750 copies printed.

Editorial Board: G. M. Idlis, M. G. Karimov, Z. V. Karyagina (Secretary), D. A. Rozhkovskiy, and V. G. Pesenkov (Resp. Ed.); Eds.: L. S. Rzhondkovskaya, and M. Ya. Brailovskaya; Tech. Ed.: V. P. Prokhorov.

PURPOSE: This publication is intended for astrophysicists.

COVERAGE: This is a collection of 13 articles on problems in astrophysics. Individual articles discuss: the forces of gravity, radiative pressure, and inter-reaction of heavenly bodies; the distribution of surface brightness in reflecting nebulae; the relative motion of double stars with corpuscular emission; the photographic determination of the position of the sodium cloud released by the second Soviet cosmic rocket; the relationship between the decrease in the kinetic temperature of the corona and its monochromatic emission in the region of protuberances; the relationship between the velocities of moving sunspot protuberances and variations in their brightness; the ratio of photo-emulsion density to the polarization plane of light falling

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News of the Astrophysics Institute (Cont.)

SOV/4605

at different angles; airglow emissions in the red band spectrum as observed from Alma-Ata; brightness and polarization of the daytime sky observed in the almucantar of the sun in August 1956 in Alma-Ata; the effect of aerosols in the scattering of light in the near-surface layer; the results of an investigation of the absorption function in the p water vapor band; the distribution of energy in the spectrum of the daytime sky. No personalities are mentioned. Each article is accompanied by a brief English summary and references.

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84582

S/035/60/000/009/015/016  
A001/A001

# New Methods of Determining Masses of Cosmic Systems Based on the Relativity Theory Effect

displacement of spectral lines, and b) deflection of light beams in a gravitational field (Einstein effect). In the first case, displacements of spectral lines for very massive or very dense bodies (such as the elliptic galaxy NGC 3115) amounts to  $\sim 0.4$  km/sec, which is within the accuracy limits of the best modern estimates of apparent Doppler velocities of extragalactic nebulae ( $\pm 1$  km/sec). Studies of large clusters of galaxies are of a greater prospect. Thus for the cluster in Coma Berenices the effect expected must amount to  $\sim 5$  km/sec. The method of determining the masses of cosmic systems from Einstein's effect is of a special interest. It follows thereof, that any distant actually round galaxy, while being observed at an angular distance  $\Delta = R/r$  from the center of a closer system with the unknown mass  $M$  and separated from us by distance  $r$  ( $R$  is the linear separation between the objects considered in the image plane) should acquire apparent flattening

$$h^* = \frac{a^* - b^*}{a^*} = \frac{8GM}{c^2 R \Delta} = \frac{8GM}{c^2 r \Delta^2}$$

In this case the apparent major ( $a^*$ ) and minor ( $b^*$ ) semi-axes of the distant

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A001/A101

3,1560

AUTHOR:

Idlis, G.M.

TITLE:

The connection of general properties of gravitational potential of stellar systems with the general form of motion integrals of an individual star

PERIODICAL:

Referativnyy zhurnal. Astronomiya i Geodeziya, no. 6, 1961, 41, abstract 6A355 ("Izv. Astrofiz. in-ta AN KazSSR", 1959, v. 8, 24-52, Engl. summary)

TEXT:

The author shows that an integral which does not impose any restrictions on gradient of potential  $\phi$  is energy integral necessitating the stationarity of  $\phi$ . If time expired since the origination of a stellar system  $T \gg P$ , where  $P$  is time of an essential displacement of stars in the stellar system, a stationary state sets in. Integrals not dependent explicitly on time  $t$ , are divided into two parts: an even and an odd part relative to velocity vector, which, taken separately, represent integrals of motion. Therefore it is always possible to consider an integral independent of  $t$  either even or odd. If phase density  $\psi$  is a function of energy integral alone, then a self-gravitating stellar system must be spherically

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23938

S/035/61/000/006/021/044  
A001/A101

The connection of general properties ..

symmetrical (the proof presented in the paper is erroneous. Reviewer). In the general case of a stationary self-gravitating system,  $\Psi$  must admit at least one more single-valued integral, independent of  $t$ , which can be the argument of  $\Psi$ . If there are systematic motions of stars in the system, this integral must be odd. It is shown that in this case the system has axial symmetry, and integral is reduced to integral of areas. Assuming the existence of a third independent single-valued integral, the author proves the absence, generally speaking, of other single-valued independent integrals. If the third single-valued integral is quadratic in respect to velocities, the self-gravitating system has a symmetry plane (the proof presented in the paper is erroneous. Reviewer). An attempt is made to derive a theoretical substantiation for Parenago's law of dependence of  $\Phi$  in the symmetry plane on distance to the symmetry axis. There are 60 references.

G. Kuzmin

[Abstracter's note: Complete translation]

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32043  
S/035/61/000/011/026/028  
A001/A101

3,1900 (1057, 1172, 1538)

AUTHOR: Idlis, G. M.

TITLE: Force interaction of massive radiating bodies

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 11, 1961, 83 - 84, abstract 11A600 ("Izv. Astrofiz. in-ta, AN KazSSR", 1960, v. 10, 3 - 14, Engl. summary)

TEXT: In addition to forces of gravitational interaction, radiation pressure, and effects of Pointing-Robertson and Radziowski, it is necessary to take into account forces arising due to curvature of trajectories of radiation (both photon and corpuscular one) caused by the gravitational fields of these bodies (Einstein's effect for photons). This curvature of trajectories leads first, to an increase in the effective absorption cross section of the body in comparison with the geometric cross section. Secondly, as a consequence of the change in direction of motion of corpuscles emitted by one body and flying past the second body, projections of corpuscle momenta onto direction  $r_{12}$  must change. In virtue of the law of conservation of the total momentum of the system, the gravitating body must experience an additional reaction force  $F_{12r}$ . To determine force  $F_{12r}$ ,

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Force interaction of massive radiating bodies

is interesting to note that reaction force (2) balances completely the radiation pressure force already at the distance

$$r_{12}^* = \frac{c^2 R_2^2}{8GM_2}$$

For a body having parameters of the Sun this critical distance is  $\sim 270$  AU. Hence the conclusion can be drawn that in wide binaries all effects of radiation pressure are compensated by the action of reaction force (2). At the distance

$$r_{12}^{**} = \frac{c^3 M_1}{2L_1}$$

force  $F_{12r}$  comes up to conventional gravitational force. Besides radiative emission of celestial bodies, it is necessary to take into account also their corpuscular emission. The expression for reaction force arising in this case looks as follows:

$$\vec{F}_{12r}^* \approx - \frac{Gm_1 M_2}{U_1 r_{12}^2} \cdot \vec{r}_{12}, \quad (3)$$

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Force interaction of massive radiating bodies

where  $m_1$  is expenditure of mass of body  $M_2$  per unit time,  $U_1$  is velocity of corpuscles, other designations being the same. (An assumption  $U_1 \gg \sqrt{2GM_2/R_2}$  was made while deriving formula (3)). A comparison of (3) with (2) shows that in so far as usually  $U_1 \ll c$ , the corpuscular reaction force (3) may exceed many times (by  $c/2U_1$  times) the photon reaction force (2), even at the same rates of mass losses by both bodies of a binary system ( $m_1 = \frac{L_1}{2}$ ). The so-called dynamical friction force has an analogous nature with forces (2) and (3), which plays an essential role in the accretion theory. This force arises, e.g., while a star crosses a cloud of diffuse matter, due to curvature of trajectories of particles flying past this star. Dynamical friction force is most effective in the case of comparable masses of the body and the cloud and a minimum initial speed of their relative motion. Yet even under such conditions a complete braking of a foreign body approaching the cloud at a parabolic speed, is possible only after multiple passages. Duration of passages exceeds considerably the life time of interstellar clouds. This circumstance testifies against the hypothesis of accidental conversion of dwarf-stars into giants due to their sticking in massive clouds of diffuse matter and subsequent growth by accretion of interstellar substance. Examples show that in dynamics of the formed stellar systems it is always possible

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Force interaction of massive radiating bodies

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A001/A101

to restrict oneself to taking into account only conventional forces of gravitational interaction. There are 9 references.

B. Gel'fgat

[Abstracter's note: Complete translation]

Card 5/5

S/035/62/000/007/033/083  
A001/A101

AUTHORS: Gaynullina, R. Kh., Idlis, G. M.

TITLE: On rotation and mass of the Large Magellanic Cloud

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 7, 1962, 45,  
abstract 7A331 ("Izv. Astrofiz. in-ta AN KazSSR", 1961, v. 12,  
56 - 58; English summary)

TEXT: The rotation curve of the LMC derived from radial velocities of H II regions measured at the Mount-Stromlo Observatory is reconsidered. The calculated values of rotational velocities and their probable errors do not contradict the rotation curve obtained previously (RZhAstr, 1961, 2A541) and estimate of the LMC mass  $M = (2.4 \pm 0.7) \cdot 10^9 M_{\odot}$ .

I. P.

[Abstracter's note: Complete translation]

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IDLIS, G.M. \_\_\_\_\_

Existence and characteristics of three fundamental independent first motion integrals for an individual star which enter in the general expression for the phase density of self-gravitating star systems. *Izv.Astrofiz.inst.AN Kazakh.SSR* 11:3-40 '61.

(MIRA 14:3)

(Mechanics, Celestial)  
(Stars)



IDLIS, G.M.; GAYNULLINA, R.Kh.

Applicability of the ergodic theorem to stationary axisymmetric  
self-gravitating star systems. Izv.Astrofiz.inst.AN Kazakh.  
SSR 11:41-53 '61. (MIRA 14:3)

(Mechanics, Celestial)  
(Stars)

IDLIS, G.M.

Causation as the basis of cosmology. Izv. Astrofiz. inst. AN Kazakh.  
SSR 12:37-55 '61. (MIRA 14:12)

(Cosmology)

(Causation)

s/035/62/000/006/043/064  
A001/A101

AUTHOR: Idlis, G. M.

TITLE: Causality as a basis of cosmology

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 6, 1962, 70,  
abstract 6A532 ("Izv. Astrofiz. in-ta AN KazSSR", 1961, v. 12, 37 -  
55, English summary)

TEXT: The uniqueness of the Universe has the consequence that all its particular characteristics should be necessarily inherent to it, if the principle of causality holds in respect to the Universe. On this basis, the following universal cosmological principle is formulated: Any quantitative physical characteristic, when one goes over from an arbitrary observed part of the Universe to the Universe as a whole, either remains identically unchanged, or tends to infinity or to zero, or else becomes meaningless. The whole series of consequences is derived from this principle: 1) Directivity, one-dimensionality and endlessness of time flow; 2) tridimensionality and infinity of space; 3) connectivity of space-time; 4) absoluteness, on cosmological scale, of the special theory of re-

Card 1/2

Causality as a basis of cosmology

S/035/62/000/006/043/064  
A001/A101

lativity and equivalence of the Universe as a whole to physical vacuum; 5) absence of a non-zero cosmological constant in equations of the general theory of relativity; 6) existence of the Planck constant and validity of the principle of uncertainty; 7) elementary reversibility and statistical irreversibility; 8) inverse-proportionality to distance square of gravitational action of a macroscopical spherically-symmetric body. There are 14 references. ✓

P. Kard

[Abstracter's note: Complete translation]

Card 2/2

S/505/61/012/000/005/007  
EO32/E514

AUTHORS: Idlis, G.M. and Obashev, S.O.  
TITLE: The magnetic field and the period of rotation of Venus  
SOURCE: Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut. Izvestiya. v.12, 1961, 91-94

TEXT: A review of published information on the rotation of Venus lead the present authors to the conclusion that the period of rotation of Venus is of the order of 14 days, although it is pointed out that this estimate may be ~~of~~ but by not more than a factor of 2. If it is assumed that the magnetic moment of a planet is proportional to its rotational angular momentum and that the mass, the dimensions and the structure of Venus are similar to that of the Earth, then its magnetic moment turns out to be of the order of  $6 \times 10^{25}$  /T gauss.cm<sup>3</sup>. On the other hand, J. Houtgast (Ref.21, 175, 4459, 678-679) has estimated that the magnetic moment should be greater by two orders of magnitude than that given by the above relation. The present authors argue that observations of strong auroras on Venus and their interpretation in terms of

Card 1/2

The magnetic field and the ...

S/503/61/012/000/005/007  
E032/E514

radiation belts retained by the magnetic field and supplied by solar corpuscular streams tends to favour their estimate as opposed to Houtgast's estimate. The general conclusion is that the magnetic moment of Venus should be approximately

$4 \times 10^{24}$  gauss cm<sup>5</sup>. There are 27 references: 14 Soviet-bloc and 13 non-Soviet-bloc. The four latest English-language references read as follows: Ref.9: Firsoff V.A. Venus through colour filters, J Brit Astron. Assoc., 1957, 67, 2, 66-75; Ref.10: Read P.A. The cloud markings of Venus. Some factors governing their visibility, South Stars, 1958, 17, 6, 92-96; Ref.17: Kraus J.D. Recent observations of radiosignals from Venus at 11 meters wave length. A.J., 1957, 62, 1, 21; Ref 24: Warner, B. The emission spectrum of the night side of Venus. M.N., 1960, 121, 3, 279-283.

Card 2/2

S/503/61/012/000/007/007  
E032/E514

AUTHOR: Idlis, G.M.

TITLE: The origin and size distribution of various dust particles in different layers of the Earth's atmosphere

SOURCE: Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut. Izvestiya, v.12, 1961, 99-103

TEXT: In a previous paper the author showed that for a random disintegration of a quasi-uniform and isotropic body the number of fragments with effective radii lying between  $r$  and  $r + dr$  is given by

$$dn_0(r) \approx k_0 r^{-4} dr.$$

(1) This theoretical distribution is in good agreement with the observed distribution of major asteroids and therefore can be used as an argument in favour of the hypothesis that small planets appear as a result of the fragmentation of one or more major protoplanets between the orbits of Mars and Jupiter. It is now shown that the theoretical deductions reported in Ref.1 are in

Card 1/2

The origin and size distribution ... S/503/61/012/000/007/007  
E032/E514

agreement with published experimental data on the size distribution of dust particles in the Earth's atmosphere. There are 12 references: 8 Soviet-bloc and 4 non-Soviet-bloc. The English-language references read as follows: Ref.5: Junge C.J. of Meteorology, 12, 1, 13, 1955; Ref.11: Hodge P.W. Nature, 178, No.4544, 1251, 1956; Ref.12: Hamenway C.L. and Fullam E.F. Identification of micrometeorites. Madison, Wisconsin, July 2, 1958. ✓

Card 2/2

IDLIS, G.M.; KARYAGINA, Z.V.

Cometic nature of the Tunguska meteorite. Meteoritika no.21:32-43  
'61. (MIRA 14:11)

(Podkamennaya Tunguska Valley--Meteorites)

24638

3.2100  
3.2400

S/031/61/017/005/001/002  
B117/B203

AUTHOR: Idlis, G. M., Candidate of Physics and Mathematics  
TITLE: Conquest of cosmic space  
PERIODICAL: Akademiya nauk Kazakhskoy SSR. Vestnik, v. 17, no. 5,  
1961, 10-14

TEXT: In connection with the cosmic flight of the first astronaut Yu. A. Gagarin with the space ship "ВОСТОК" (Vostok), the author reports on some studies in the field of cosmic research made at the Astrofizicheskii institut AN KazSSR (Astrophysics Institute AS Kazakhskaya SSR). Academician V. G. Fesenkov ascertained, some years ago, the dustlike nature of the interplanetary medium scattering the sunlight on the basis of photometric and polarization observations of the zodiacal light. This theory was confirmed by results directly obtained with the aid of space rockets. Similar experimental confirmations can be expected for theoretical conclusions on the quality of the moon's surface. At the 5th Meteorite Conference in Moscow in 1953, the author dealt with the problem of shattering of solid bodies in the interplanetary space when they collide.

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S/031/61/017/005/001/002  
B117/B203

Conquest of cosmic space

He noted that in such a random shattering the size distribution of fragments in first approximation must be inversely proportional to the 4th power of the radius. This theoretical distribution law has been frequently confirmed. Recently, the author and S. O. Obashev had theoretically studied the problem of the magnetic field and the period of axial rotation of Venus. They found the magnetic moment of the order of magnitude  $4 \cdot 10^{24}$  gauss·cm<sup>3</sup> and a period of about 2 weeks. They hope these results will soon be confirmed by direct measurements. D. A. Rozhkovskiy, Head of the otdel astrofiziki (Astrophysics Division), and his collaborators, did great work in the field of precise photographic observation of artificial earth satellites and of the artificial comet during the flight of the 2nd moon rocket. On the basis of an analysis of trajectories of artificial earth satellites, it will be possible to solve the problem raised by N. A. Kozyrev as to the north-south asymmetry of the earth. A checkup, made by T. B. Omarov and the author of N. A. Kozyrev's experiments with the anomalous deviation of bodies falling toward south yielded a negative result. V. B. Shikin, Graduate from KazGU (Kazakh State University), however, found a corresponding longitudinal asymmetry of the

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Conquest of cosmic space

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S/031/61/017/005/001/002  
B117/B203

rotating electron cloud in his experiment with a diode in the magnetron. This asymmetry of rotating bodies in the direction of the rotational axis is incompatible with classical physics, and deserves close theoretical and experimental studies. D. A. Aleksandrov found that the space-time continuum of the universe as a whole had been described by Einstein's special theory of relativity. The so-called relativistic cosmological models, however, which are based on the general theory of relativity, do not describe the world as a whole but only individual cosmic systems therein, similar to our metagalaxy. These systems are finite and not isolated. Their totality must be considered on the background of the universe as a whole, i. e., with a plane (pseudo-Euclidean) metric in the infinity, without any cosmological constants differing from zero in the equations of the general theory of relativity. Our metagalaxy is by no means the whole universe. It is only a typical cosmic system. There must be life on corresponding planets revolving round certain stars in our galaxy and in other galaxies. Radioastronomers are already endeavoring to establish communications with rational beings who might populate planets in adjacent solar systems. By means of cybernetics it will be possible to decipher the language of other rational beings.

Card 3/4

APPROVED FOR RELEASE: Thursday, July 27, 2000

24638  
S/534/61/007/002/005  
D055/D114  
CIA-RDP86-00513R0005 32C

3,5920  
AUTHOR: Idlis, G.M., and Karyagina, Z.V.

TITLE: The cometary nature of the Tunguska meteorite

SOURCE: Akademiya nauk SSSR. Komitet po meteoritam. Meteoritika, no. 21, 1961, 32-43.

TEXT: In conducting this study, the authors attempted to support the hypothesis that the Tunguska meteorite was the nucleus of a small comet which formed a tail before colliding with the Earth. Characteristics associated with the approach and explosion of the Tunguska meteorite are discussed and calculated. The estimated initial and final speeds of 60 km/sec and 6 km/sec indicate that the meteorite met the Earth travelling in a direction opposite to that of the Earth and the final mass of the meteorite exploded and dispersed in the Earth's atmosphere. I.S. Astapovich (Ref.3; Priroda, no.3, 1951, 13-23) made a direct estimate of the explosive force of the meteorite at 10<sup>23</sup> erg, which the authors find in agreement with their calculation figure. They estimate the change in the geomagnetic field in Irkutsk when the tail of the meteor collided with the Earth at about 3·10<sup>-4</sup> gauss, which agrees fairly with the direct observations of K.G. Ivanov [Abstracter's note: see abstract 004 of this set]. The geomagnetic disturbance occasioned by

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32138

S/534/61/000/021/002/005  
D055/D114

The oometary nature ...

Meteorite]Izd-vo AN SSSR, 1949) and L. Apostolov, Director of the meteor-  
ological bureau of the Kubano-Chernomorskiy krayevoy institut (Kuban' and  
Black Sea Regional Institute), (Ref. 24: Mirovedeniye, no. 3, 1926). There  
is 1 table and 34 references, of which 27 are Soviet and 7 non-Soviet. The  
3 English-language references are: F.J.W. Whipple, The Quarterly Journal of  
the Royal Meteorological Society, 56, N 236, 1930, 287-304; A. Chapman and  
K. Ferraro, Terrestrial Magnetism, 36, 77, 1931, 171; 37, 1932, 147;  
C.W. Allen, Astrophysical Quantities, London, 1955.

X

Card 3/3

DDTS, G.M.

Confirmation of the hypothesis of the origin of Magellanic  
Clouds in the Galaxy as the result of a collision of the  
Galaxy with the extragalactic nebula NGC 55. Astron. zhur.  
38 no. 1:182-183 Ja-F '61. (MIA 14:2)

1. Astrofizicheskii institut AN SSSR.  
(Milky Way) (Cosmogony)

IDLES, G.H.

Confirmation of the presence of a diffuse matter in globular clusters. Astron. zhur. 38 no. 1:184-185 Ja-F '61.  
(ML-A 14:2)

1. Astrofizicheskiy institut AN KazSSR..  
(Interstellar matter) (Stars--Clusters)

IDLIS, G.M.

Symmetry of self-gravitating stationary axisymmetrical stellar systems  
relative to the equatorial plane. Izv.Astrofiz.inst. AN Kazakh.SSR  
13:3-15 '62. (MIRA 15:6)  
(Stars--Distribution)

IDLIS, G.M.; GAYNULLINA, R.Kh.; KURMAKAYEV, Z.Kh.

Visible contraction of far spherical components of multiple  
galaxies due to the Einstein effect. Izv.Astrofiz.inst.AN  
Kazakh.SSR 14:3-18 '62. (MIRA 15:8)  
(Galaxies)

IDLIS, G.M.

Structure and dynamics of the Metagalaxy considering the dominating background of radiation. Izv.Astrofiz.inst.AN Kazakh.SSR  
15:3-24 '62. (MIRA 16:1)

(Galaxies)

IDLIS, G.M.; KURMAKAYEV, Z.Kh.; OMAROV, T.B.

Structure and dynamics of cosmic systems in the metagalaxy. Izv.  
AN Kazakh. SSR. Ser. fiz.-mat.nauk no.1:3-14 '63. (MIRA 17:4)



UDIS, G.M.

Probable nature of the magnetic fields of Venus and Mars. Izv.  
AN Kazakh. SSR. Ser. fiz.-mat.nauk no.1:15-17 '63. (MIRA 17:4)

ACCESSION NR: AP4028473

S/0031/64/000/003/0084/0085

AUTHOR: Idlis, G. M. (Candidate of physico-mathematical sciences)

TITLE: Astrophysic in Kazakhstan

SOURCE: AN KazSSR. Vestnik, no. 3, 1964, 84-85

TOPIC TAGS: astronomy, physics, astrophysics, stellar kinetics, stellar dynamics, galaxy, galactic parameter, nebula, solar system, meteor

ABSTRACT: On the initiative of the Astrofizicheskiy instituta AN KazSSR (Astrophysical Institute AN Kazakh SSR), an All-Union conference was held October 10-16, 1963 at Alma-Ata on the kinetics and dynamics of the stellar systems and on the physics of interstellar space. The first half of the conference was devoted to a review of the data on stellar kinetics and dynamics. G. G. Kuzmin, corresponding member of the Academy of Sciences, Estonian SSR, delivered a report on the present problems of stellar dynamics, while I. L. Genkin discussed certain applications of stellar dynamics. T. A. Agekyan spoke on spherical stellar aggregations, and K. Veltmann discussed a generalized Shuster's model of the spherical stellar system. Other delegates presented papers on the distribution of density in stellar

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ACCESSION NR: AP4028473

systems and on the velocities of stars. The report of T. A. Agekyan's topic of the quasistationary state of stellar systems and stars evoked particular interest. G. G. Kuzmin and others discussed the hydrodynamics of stellar systems. S. A. Kutuzov, Ya. E. Eynasto, and I. L. Genkin dealt with the subject of galactic parameters. G. M. Idlis reviewed the problems of theoretical galactic models. A number of papers were devoted to the dynamics of galaxies and of their aggregates. The second part of the conference was given to the physics of interstellar space. In the opening address Academician V. G. Fesenkov outlined the problems dealing with this subject. D. A. Rozhkovskiy and others presented papers on the reflecting nebulae of great optical density and on the properties of interstellar dust. G. A. Gurzadyan discussed the gradient of electronic temperature in gaseous galaxies. Several papers were devoted to nebular spectra, the superstars, and the galactic magnetic field. On October 28-29, 1963, there took place at Alma-Ata another All-Union Conference on "The Earth as a Cosmic Body." It was opened by Academician V. G. Fesenkov with an address on the evolution and physical properties of the earth and planets, as a consequence of the peculiarities in their origin. This was followed by 11 papers on the solar system and on various aspects of the earth, including its origin, its age, the distribution of radioactive elements, and the role of meteors in shaping the earth's surface. The materials from this conference --

Cord 2/3

ACCESSION NR: APL028473

will be printed in a publication commemorating the 400th anniversary of Galileo's birth.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 17Apr64

ENCL: 00

SUB CODE: PH, AS

NO REF SOV: 000

OTHER: 000

Card 3/3

IDLIS, G.M., doktor fiziko-matematicheskikh nauk

Dynamics of stellar systems. Vest. AN Kazakh SSR 21 no.3:60-65 Mr  
'65. (MIRA 18:5)

IDLIS, G.M.

Rational foundations and current problems in the theory of galactic models. Trudy Astrofiz. inst. AN Kazakh. SSR 5:105-178 '65.

Applicability of the theory of relativity in astronomy. Ibid.: 179-190

Relative luminosity of nebulae illuminated by stars. Ibid.: 262-267  
(MIRA 18:6)

LIVSHITS, G.Sh.; FESENKOV, V.G., akademik, red.; IDLIS, G.M., doktor  
fiz.-matem.nauk, zamestitel' red.; PYASKOVSKAYA, Ye.V.,  
doktor fiz.-matem.nauk, red.; ROZHKOVSKIY, D.A., doktor fiz.-matem,  
nauk, red. toma; RUDINA, M.P., kand.fiz.-matem.nauk, red.;  
ROZHKOVSKIY, D.A., doktor fiz.-matem.nauk, red.

[Light scattering in the atmosphere. Pt.1.] Rasselanie sveta v  
atmosfera. Alma-Ata, Nauka. Pt.1. 1965. 176p (Akademia nauk  
Kazakhskoi SSR. Astrofizicheskii institut. Trudy, vol.6)  
(MIRA 18:5)

GINZBURG, O.F.; KVIAT, E.I.; IDLIS, G.S.

Dyes with antipyrine rings. Part 8: Rate of conversion of dyes  
to carbinol compounds. Zhur.ob.khim. 32 no.8:2633-2637 Ag '62.  
(MIRA 15:9)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.  
(Dyes and dyeing) (Antipyrine) (Alcohols)



25(2)

SOV/117-59-3-3/37

AUTHORS: Liberman, L.A., and Idlis, Ye.M., Engineers

TITLE: An Automat for Making Contacts (Avtomat dlya izgotovleniya kontaktov)

PERIODICAL: Mashinostroitel', 1959, Nr 3, pp 4 - 5 (USSR)

ABSTRACT: Detailed design and operation information is given on a new special grinding machine for electric contacts on hard metals. It accepts work of 4 mm diameter or 0.8 - 5 mm thickness and from 50 mm up to 4 meter length, working with a 200 mm diameter and 1 mm thick grinding wheel made with vulcanite for a binder. The design includes a photoelectric tracing device on the wheel slide, so mounted that the light beam cannot reach the photo-resistance behind the grinding wheel until the grinding wheel wears down to a certain diameter. The electric

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SOV/117-59-3-3/37

An Automat for Making Contacts

pulse then produced by the photo-resistance, switches-  
in the compensation-feed mechanism. The machine is  
illustrated by a diagram (Figure 1). It has been  
tried out on tungsten rod with satisfactory results.  
There are two diagrams.

Card 2/2

IDOMSKIY, B.M.; KOLOTIY, N.A., veter. vrach

Vaccination of poultry against infectious laryngotracheitis. Veteri-  
nariia 40 no.5:38-39 My 63. (MIRA 17:1)

1. Glavnyy veterinarnyy vrach Ptitsesovkhoza-kombinata "Yuzhnyy",  
Krymskoy oblasti (for Idomskiy). 2. Ptitsesovkhoza-kombinata "Yuzh-  
nyy", Kryskoy oblasti (for Kolotiy).

IDOMSKIY, I.M.

Propnylaxis of poultry diseases in large-size poultry houses.  
Veterinariia 39 no.8:19-21 Ag '62. (MIRA 17:12)

1. Glavnyy veterinarnyy vrach ptitseosovkhoza "Yuzhnyy",  
Krymskoy oblasti.

KOPIT, B.S.; MIKHAYLOV, A.V.; CHLENOV, A.F.; IDOV, P.I.; YUKHNOV, I.I.;  
TSARSKIY, S.V.; BARAUSOV, V.A.; PETROV, A.I.; LIFSHITS, L.Z.;  
ABATUROV, K.I.; SOKOL'SKAYA, Zh.M.; MEZHEVICH, V.N.; DAVYDOV,  
L.I.; VLASIKHIN, A.V.; CHEKALOV, L.N.; STARICHKOV, T.I.;  
KHUBLAROV, A.Ye., red.; PITERMAN, Ye.L., red.izd-va; PARAKHINA,  
N.L., tekhn.red.

[Our beacons; collection of articles on progressive workers in  
lumber, paper, woodworking industries and forestry] Nashi maiaki;  
sbornik ocherkov o peredovykh lyudiakh lesnoi, bumazhnoi i derevo-  
obrabatyvalushchei promyshlennosti i lesnogo khoziaistva. Moskva,  
Goslesbumizdat, 1961. 125 p. (MIRA 15:2)  
(Forests and forestry) (Wood-using industries)

KARPOVA, M.P., dotsent, kand.fiziko-matem.nauk; DOVA, M.B., assistant

Corrugated rail wear. Trudy NIIZHT no.31:21-31 '62. (MIRA 16:9)  
(Railroads--Rails--Testing)

IDRICEANU, T.; IORGA, N.; ERHAN, V.

Mineralogical research on some Sarmatian clays in the Moldavian Plateau. Pt. 2. Studii chim Iasi 14 no.1:103-111 '63.

1. Universitatea "Al. I. Cuza" Laboratorul de Mineralogie.

RUMANIA/Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42892.

Author : Savul Mircea, Idriceanu Traian.

Inst : Iasi University.

Title : Contribution to the Petrochemical Characterization  
of Magmatic Massifs of Northern Dobruja.

Orig Pub: An. stiint. Univ. Iasi, 1956, Sec. 2, 2, No 2, 339-362.

Abstract: Recomputations are made of chemical analyses and variation diagrams, according to the method of A. N. Zavaritskiy, of two groups of rocks: 1) from granites to granodiorites and tonalites, and 2) gabbro. The possibility is discussed of a genetic connection between these groups, and of the effect of assimilation processes (in connection with the enclosing Paleozoic shales).

Card : 1/1

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00051832

CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry.

ABS. JOUR. : RZKhim., No. 16 1959, No.

56712

AUTHOR : Idriceanu, T.

INST. : Iasi University

TITLE : On the Mineralization of the Eastern Carpathians.  
Mineralization of Sulfur Compounds in the Gemenea-  
Ostra District (Suceava Region).

ORIG. PUB. : An Stiint Univ Iasi, Sec 2-3, no 1-2, 387-394  
(1957)

ABSTRACT : The author presents results obtained in the course of an investigation of the geologic structure of the crystalline slates in the Eastern Carpathians and the related mineralization resulting in the formation of quartz-baryte veins containing pyrites, galenites, and chalcopyrites. The structural and mineralogic study of the ore deposits points to their hydrothermal origin with superimposed metamorphism, resulting in the appearance of secondary phenomena and changes in the structure of the deposits.

G. Volkov

CARD: 1/1



IDRICHANU, T., dotsent; POMYRLYANU, V., nauchnyy sotrudnik

Mirchi Savul, 1895-1964; obituary. Geokhimiia no.3:376-377 Mr '65.  
(MIRA 18:7)

IDRISOV, A.S., kand.med.nauk

Organization of first aid among agricultural workers. Zdrav.  
Kazakh. 17 no.6:26-28 '57. (MIRA 12:6)

1. Kzyl-Ordinskogo oblastnogo otdela zdravookhraneniya.  
(KZYL-ORDA PROVINCE--MEDICINE, RURAL)

IDRISOV, A.S., kand.med.nauk

Characteristics and prevention of accidents in rice production.  
Zdrav.Kazakh. 17 no.7:7-11 '57. (MIRA 12:6)

1. Glavnyy khirurg Kzyl-Ordinskogo oblzdrazvotdela.  
(KAZAKHSTAN--AGRICULTURE--ACCIDENTS)  
(RICE WORKERS--DISEASES AND HYGIENE)

IDRISOV, A.S.

Treatment of tuberculous peritonitis with streptomycin. Trudy Semipal.  
med. inst. 2:174-179 '59. (MIRA 15:4)

1. Iz kafedry obshchey khirurgii Semipalatinskogo gosudarstvennogo  
meditsinskogo instituta (zaveduyushchiy A.S.Idrisov).  
(STREPTOMYCIN) (PERITONEUM--TUBERCULOSIS)

IDRISOV, A.S., dotsent

Recurrent echinococcosis. Trudy Semipal. med. inst. 2:284-294 '59.  
(MIRA 15:4)

1; Iz kafedry obshchey khirurgii Semipalatinskogo gosudarstvennogo  
meditsinskogo instituta (zav.kafedroy - dotsent A.S.Idrisov).  
(HYDATIDS)

IDRISOV, A.S., dotsent

Surgery on the peripheral nerves in leprous patients.  
Zdrav. kazakh. 22 no.1:8-11 '62. (MIRA 15:3)  
(LEPROSY)  
(NERVES, PERIPHERAL—SURGERY)

IDRISOV, A.S., dotsent

Transplantation of skin from the hairy portion of the scalp for  
restoration of the eyebrows in leprous patients. Zdrav.Kazakh.  
22 no.7:14-15 '62. (MIRA 16:1)  
(LEPROSY) (EYEBROWS—SURGERY)(SKIN GRAFTING)

IDRISOV, A.; ABDULGAFAROV, Ye., red.; GOLUBEV, I., red.

[Surgery in leprosy] Khirurgiia lepy. Alma-Ata, Kaz-  
gosizdat, 1963. 277 p. (MIRA 17:6)



IDRISOV, D.V.; ICHMAYLOV, A.D.

Basic aspects of the unproductive operation of UDU systems  
and methods for their elimination. Transl. from Russ. into  
ref'typed. no.5:27-33 '64. (RUKA 17:9)

1. Makhachkalinskaya perevalchnaya neftepr.

IDRISOV, G., brigadir prokhodchikov

Miners' work of honor. Sov.profsoiuzy 7 no.8:46-47 Ap '59.  
(MIBA 12:7)

1. Shakhta imeni Stalina tresta "Stalinugol" Kemerovskoy oblasti.  
(Kemerovo Province--Coal miners) (Labor productivity)

IDRISOV, I.M.

Content of sulfhydryl groups in leucocytes of the peripheral  
blood in nuclear schizophrenia patients. Report No.1. Zhur.  
nevr. i psikh. 64 no.9:1356-1359 '64. (MIRA 17:12)

1. Kafedra psikhatrii (zaveduyushchiy - prof. V.A. Glasov)  
Dagestanskogo meditsinskogo instituta, Makhachkala.

ИДРИСОВ, К.

AKHINZHANOV, M., redaktor; AKHMETOV, Z., redaktor; BEKKHOZHIN, Kh., redaktor;  
SAYKIYEV, Kh., redaktor; SIL'CHENKO, M., redaktor; SMIRNOVA, N.,  
redaktor; BERNSTEIN, S.A., redaktor; IDRISOV, K., redaktor; BOROKINA,  
Z.P., tekhnicheskii redaktor

[Life and works of Abai; a collection of articles] Abaidyn omiri men  
tvorchestvo. Zhizn' i tvorchestvo Abaia; sbornik statei. Pod red.  
M.Akhinshanova i Z.Akmetova. Alma-Ata, 1954. 269 p. [In Kazakh and  
Russian] (MLA 9:12)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut yazyka i  
literatury.

(Kunanbaev, Abai, 1845-1904)

IDRISOV, K.D.

Species of the genus *Harmodia* Hbn. in the Caucasus [with summary in English]. Zool.zhur. 38 no.1:76-81 Ja '59. (MIRA 13:4)

1. Chair of Zoology, Daghestan State University, Makhachkala.  
(Caucasus--Owlet moths)

IDRISOV, M., inzh.

Device for cutting meat, fish, and other products. Mias.ind.SSSR  
31 no.2:47-48 '60. (MIRA 13:8)  
(Food industry--Equipment and supplies)

IDRISOV, M. (g.Leningrad)

Lever knife for cutting meat and fish. Sov.torg. 33  
no.8:49-50 Ag '60. (MIRA 13:8)  
(Kitchen utensils)

AUTHOR: Idrisov, M.M. 208  
TITLE: The cabin of a tower crane. (O kabine bashennogo krana.)  
PERIODICAL: "Mekhanizatsiya Stroitel'stva" (Mechanisation of Construction),  
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ABSTRACT: The location of the crane operator's cabin is investigated. The ideal positioning would be on the level of the floor which the crane serves. Labour waste occurring up to now, when work had to be stopped whilst the crane was working overhead, could be eliminated by this arrangement. When operating the crane M - 3 - 5 - 10 the operator does not always have a clear view of the working platform and this causes frequent accidents. He has to rely on signals given by other workers which could be misunderstood. The crane operatives are requesting cabins which could be lifted according to the required working level. The described cabin can be positioned by using the lifting winch of the crane and a platform on which the cabin can be placed and re-positioned at a required level. Requirements of a well-designed cabin are discussed. There are 5 diagrams.

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electro-cerium wheels: 36, 48: No. 20-25%, No. 28-30%, No. 40-25%  
36, 48: No. 20-25%, No. 28-30%, No. 40-25%  
60 : No. 60-25%, No. 60-30%, No. 70-25%  
cerium wheels: 36 : No. 18-10%, No. 18-40%, No. 20-10%

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